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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/719,688

11/21/2003

Kalle Levon

Poly-44/APP

1354

26479

7590

12/18/2006

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EXAMINER

YANG, NELSON C

ART UNIT

PAPER NUMBER

1641

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/18/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/719,688

Applicant(s)

LEVON ET AL.

Examiner

Nelson Yang

Art Unit

1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-45, 66-68 and 71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-45, 66-68 and 71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/2/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 41-45, 66-68, 71 in the reply filed on November 13, 2006 is acknowledged.
2. Claims 1-40, 46-65, 69, 70, 72, 73 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on November 13, 2006.

Response to Amendment

3. Applicant's cancellation of claims 1-40, 46-65, 69, 70, 72, 73 is acknowledged and has been entered.
4. Claims 41-45, 66-68, 61 are currently pending.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. With respect to claim 44, it is unclear what is meant by the limitation that the sensor is an ELISA glycoconjugate sensor. In particular, it is unclear if applicant is stating that the sensor is being used in an ELISA, or it is merely capable of being used in an ELISA.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 41-45, 67, 71 are rejected under 35 U.S.C. 102(e) as being anticipated by Moronne et al. [US 2003/0129618].

With respect o claim 41, Moronne et al. teach the use of sensors comprising immobilized polymers on solid substrates (para. 0020) and one or more target associated molecular patterns (i.e. ligands such as glycolipids, para. 0010), wherein the polymer comprises glycopolymers such as glycopolythiophenes (para. 0010) fluoresce in the presence of analyte binding (para. 0011, 0017).

10. With respect to claims 42-43, the detection may be colorimetric using as spectrophotometer (para. 0133).

11. With respect to claim 44, the polymerization may be conducted in an ELISA plate (para. 0232).

12. With respect to claim 45, the specific binding (para. 0017) occurs between carbohydrates and an analyte (para. 0011).

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13. With respect to claim 67, Moronne et al. teach different concentration combinations of ligand are used (para. 249).

14. With respect to claim 71, the target associated molecular patterns include ligands such as glycolipids (para. 0010).

15. Claims 41-43, 45, 66, 68, 71 are rejected under 35 U.S.C. 102(b) as being anticipated by Charych et al. [US 2001/0026915].

With respect to claim 41, Charych et al. teach a sensor coated with glycopolymer substrate (array of biopolymeric material, para. 0138, wherein the biopolymeric material comprises glycopolythiophenes, para. 0010). Charych et al. further teach the graft-conjugation of ligands such as carbohydrates (para. 0141) and are used in the detection of binding with specific analytes such as hormones, enzymes, toxins, lectins, antibodies, viruses and bacteria (para. 0141).

16. With respect to claim 42, Charych et al. teach colorimetric detection of analyte binding (para. 0008).

17. With respect to claim 43, Charych et al. teach that the detection can be performed using spectrophotometry (para. 0109).

18. With respect to claim 45, the biopolymeric material may further comprise ligands (e.g., proteins, carbohydrates, lipids, etc.) that provide recognition sites for analytes, such that binding of the analyte to the ligand results in a color change of the biopolymeric material (para. 140).

19. With respect to claim 66, Charych et al. teach the generation of absorption curves (figs. 12, 13) based on binding with different analytes (para. 0170).

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20. With respect to claim 68, Charych et al. teach regions with diluted concentrations of glycoconjugates (para. 151).

21. With respect to claim 71, Charych et al. teach the graft-conjugation of ligands such as carbohydrates and may include glycoproteins and glycolipids (para. 0142).

Conclusion

22. No claims are allowed.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson Yang whose telephone number is (571) 272-0826. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

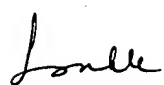
24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Nelson Yang
Patent Examiner
Art Unit 1641


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